XXIV. Descriptions of some new Species of Mydasidæ, from Western Australia, by J. O. Westwood, F.L.S.

[Read December 6th, 1847.]

The species of the family Mydasidæ described in the works of continental authors are natives of America, the south of Europe, and the east and south of Africa, only one species, M. ruficornis, having been described by Wiedemann as a native of Tranquebar. In the synopsis of this family which I published in 1841, in the first volume of my "Arcana Entomologica," I described several species from New Holland, namely, M. auripennis, M. viduatus, M. stenogaster, and M. bicolor, Cephalocera maculipennis, and the three supposed species of Apiocera. It is an interesting peculiarity in Entomo-geography to find this singular group of insects, whose metropolis is evidently South America, appearing in New Holland, where, however, it appears to be very rare.

Since the publication of the above-mentioned synopsis, I have become acquainted with several additional Australian species of this group, of which I now beg to offer the descriptions to the Entomological Society.

Mydas melleipennis, Westw. (Plate XIII. fig. 1.)

Mydas niger, marginibus thoracis cum scutello pedibusque fulvis, femoribus posticis clavatis; alis fulvis, venis rufofulvis; antennis elongatis nigris, articulo basali subrufo; abdomine elongato gracili, nigro, nitido, segmentis basalibus utrinque flavo-maculatis. Q.

Expansio alarum 1 1 unc.

Habitat in Australia occidentali. Comm. Ince.

This is a very distinct species; the head is transverse, and clothed, especially in front, with luteous hairs; the eyes black; the hypostoma prominent and fulvous; the haustellum nearly as long as the depth of the head; antennæ black, moderately long, last joint broad, basal joint varied beneath and near the extremity with red; the thorax black, the callosities at the anterior angles as well as the sides, scutellum and postscutellum dark fulvous; on each side before the insertion of the halteres is a short thick spine; the abdomen is long, narrow, and cylindrical in the female; the basal segment is transverse, glossy, and pitchy-coloured; the second joint is obconic, truncate, glossy, black, with a large yellow

spot on each side; the third joint is slightly constricted at the base; it is marked, as well as the fourth joint, with a yellow spot on each side, diminishing in size; the three following joints are black, glossy, and cylindric, and the last joint is ob-conical, terminated by an appendage, which is shortly spinose on each side. The legs are fulvous; the hind femora clavate, and finely spined. The wings are fulvescent, with dark fulvous veins. The arrangement of the veins offer several peculiarities, which exist also in the following species, but not in other insects of the genus. The body beneath is black; the second abdominal ventral segment with a fulvous fascia, and the third with two fulvous spots.

Fig. 1. The insect slightly magnified; 1 a, the head and base of the antenna seen sideways; 1 b, the proboscis and its palpi more highly magnified.

Mydas bispinifer, Westw. (Plate XIII. fig. 2.)

Mydas niger, thoracis lateribus cum scutello rufo-fulvis; abdomine maris elongato angusto clavato, articulis basalibus utrinque flavo-maculatis; alis versus costam fusco-tinctis, venis nigris; pedibus pallide flavis; femoribus posticis clavatis.

Expansio alarum 10—13 lin.

Habitat in Australia occidentali.

In Mus. Ince et Saunders.

The male of this species has somewhat the appearance of a large elongated Conops. It agrees with the preceding species in the peculiar arrangement of the veins of the wings, and in the radiated appendage at the extremity of the body of the female. The head is black, clothed in front with slight grey pubescence, the nasus rather produced and obliquely truncate. The mouth of one of the specimens examined presented the two slender filiform setose palpi, and the slender horny seta at the base, as represented in fig. 2a ** and †; the proboscis itself was porrected and as long as the head. The antennæ are black, about three times as long as the head, with the last joint flattened and pearshaped. The thorax is black, with the sides and two tubercles at the anterior angles obscure red; the scutellum is of the same colour, the hind part of the thorax being black. The sides of the mesothorax, before the halteres, are produced into two short black porrected spines. The abdomen is long, and much narrowed in its basal half; it is black, with the four anterior segments marked on each side with a pale yellow spot; the terminal ventral

segment is armed with two horny lobes (fig. 2b **), and with two curved hairy filaments (2b ††). The legs are pale yellow, with the middle of all the femora and the apical half of the posterior tibiæ black. The hind femora are clavate and serrated beneath. The wings are very slightly tinged with brown, having the costa and the space along the two chief veins rather more clouded with brown. The fourth longitudinal vein, which is furcate towards the extremity of the wing, is suddenly deflexed at a little distance in front of the furcation, crossing the next vein at right angles, being connected with the anterior branch of the basal cell (which branch, in the majority of the species of the genus, extends beyond the spot where the fourth longitudinal vein is connected with the fifth). The halteres are white.

The female of this species differs from the male in having the abdomen long and narrow, but not narrowed at the base, being of nearly equal width throughout; and the joints being rather widened beyond the middle. The terminal segment is black, the second and third with a large fulvous yellow spot on each side, and the three succeeding segments with a broad fulvous yellow fascia.

The last segment is terminated by a rounded appendage, each side of which is armed with six short blunt spines. (Fig. 2c, 2d.) The wings (or rather wing, as the only specimen of this sex which I have seen possesses only one wing) differs from the male in having the cell formed by the fourth longitudinal vein of the wing closed and appendiculated at the tip. (Fig. 2e.)

Fig. 2. The male insect magnified; 2a, the head seen sideways; 2b, the extremity of the male abdomen from beneath; 2c, the extremity of the female abdomen, seen from above; 2d, the same, seen from beneath; 2e, portion of the veins of the wing of the female.

Mydas sordidus, Westw. (Plate XIII. fig. 3.)

Mydas opacus, niger; antennis brevioribus, apicibus rufis; segmentis abdominis basi utrinque macula parva triangulari lutea; pedibus piceo-rufis; femoribus posticis obscuris; alis limpidis, venis nigris. Q

Expansio alarum fere 13 unc.

Habitat prope Adelaidam, Australiæ occidentalis. D. Fortnum. In Mus. Hope.

The head is black, with the nasus obscure fulvous, rounded, rather prominent and obliquely truncate above the mouth; the face is clothed with grey hairs. The antennæ are shorter than in

many of the species, and slender, with the last joint pear-shaped and red, the base being black. The proboscis is short. (Fig. 3a.) The thorax is obscure black. The abdomen is of equal length and continuous with the thorax, tapering beyond the middle; it is obscure black, slightly glossy, especially at the extremity of the segments. The second and three following segments are marked on each side at the base with a triangular obscure fulvous spot; the two terminal segments are dark castaneous, with the penultimate one black on its hind margin: on the underside the abdomen has the base of each segment fasciated with fulvous. legs are obscure pitchy red, with the posterior femora moderately clavate and serrated and almost black, except at the base and extremity. The wings are almost limpid, with slender pale brown veins. The upper branch of the fourth (furcate) longitudinal vein emits a very short branchlet directed towards the base of the wing, and the lower branch extends to the costa. The apical appendage of the abdomen is retracted within the apex in the only specimen of the female which I have seen.

Fig. 3. The insect slightly magnified; 3a, the head seen sideways.

Mydas limpidipennis, Westw.

Mydas niger, facie griseo-setosa, (antennis mutilis,) thorace nigro opaco; abdomine dilatato subconvexo, segmento primo nigro, griseo parum hirto, 2do et 3tio nigris utrinque ad basin macula minima albido-lutea notatis, 4 apicalibus piceis; pedibus rufo-piceis, alis perlimpidis, venis pallidis.

§

Expansio alarum 1½ unc.

Habitat in Australia occidentali.

In Mus. D. Saunders.

This species is nearly allied to the preceding. The head is black, including the nasus, which is but very slightly prominent, the face is clothed with grey hairs. The proboscis is short, the antennæ are broken off in the only specimen I have seen of the female. The thorax is black and opaque, the halteres are black at the tips. The abdomen is as broad as and continuous with the thorax at the base, the middle joints being still wider, and the apical joints are gradually attenuated; the basal segment is black, and slightly clothed with grey pile; the two following segments are black, each with a minute luteous buff spot on each side, and the four terminal segments are pitchy and rather glossy, and punctured. The abdomen beneath is black, very glossy, and margined. The legs are entirely of an obscure pitchy reddish

colour, the posterior femora but slightly clavate and serrated beneath. The wings are quite limpid, with the veins very slightly tinged with brown. The veins are arranged as is described in the last species. The abdomen is terminated by a retractile appendage, armed with a radiating series of pale-coloured setæ.

XXV. Descriptions of some new Exotic Species of Acroceridæ (Vesiculosa, Latr.), a Family of Dipterous Insects. By J. O. Westwood, Esq. F.L.S.

[Read January 3, 1848.]

THE family, whereof I propose in the present paper to describe a number of new species, is remarkable for the singularly swollen body, and more particularly abdomen, of nearly all the species, whence Latreille gave to the group the sectional name of Vesicu-This peculiarity does not exist alone in this family of insects, since we meet with various analogous resemblances in other orders of insects, and indeed in other tribes of animals. Among the Coleoptera there is the genus Chactas amongst the Melyridæ, and some Heteromerous genera, remarkable for their very swollen elytra. Amongst the Homoptera there is also a very remarkable genus of Cicadidæ from New Holland, figured by me, in the "Arcana Entomologica," under the name of Cystosoma Saundersii. There are also some Orthopterous genera, and many Homopterous, in which the scutellum is dilated and swollen, concealing the wings and abdomen; as well as some Crustacea, such as the crab-genus Hymenosoma, and some fishes, which are similarly swollen.

The naturalist will do well not to overlook these kinds of analogies, and they require to be stored up for future use. To attempt in the present state of science to apply them fully and fitly is a vain effort of skill.

Of the singular family Acroceridæ I believe nothing is still known of their habits; the species are everywhere very scarce, and no observation has hitherto been made of their transformations. The genera are but few in number, but the species are distributed over the greater portion of the globe. I do not however remember any Asiatic species, although African, Australian,